# **EXHIBIT 28**

### UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK and THE CITY OF NEW YORK,

15 Civ. 1136 (KBF) **ECF CASE** 

Plaintiffs,

-v-UNITED PARCEL SERVICE, INC., Defendant.

#### DECLARATION OF KENT D. VAN LIERE

- I, KENT D. VAN LIERE, declare the following under penalty of perjury pursuant to 28 U.S.C. § 1746:
- 1. My name is Kent D. Van Liere, and I am submitting this declaration as my direct testimony in this case.
- 2. I am a senior vice president and board member of NERA Economic Consulting, Inc. ("NERA"). I am the practice chair of NERA's Survey Research, Design, and Analysis Group. I work primarily in NERA's Denver office.
- 3. NERA is a firm that provides expert economic, financial, statistical, and survey research and analysis.

#### Background

4. I have regularly used surveys, sampling, statistics, and market research in a variety of litigation and commercial contexts.

- 5. Over the course of my 30 year career in academic and commercial research, I have personally designed and analyzed hundreds of surveys on, among other things, marketing and consumer decision-making and have facilitated hundreds of focus groups.
- 6. I also have substantial experience designing, conducting, and using surveys to measure consumer opinions and behaviors regarding products and services, including purchase processes, branding and positioning, market segmentation, product attributes, new product research, and communications strategies. In addition, I have conducted survey research, market analysis, and sampling analysis on a wide range of topics regarding consumer decision-making, consumer choice, and consumer behavior.
- 7. I also have conducted several hundred studies for leading corporations and government agencies involving studies of consumers, employees, and businesses. I have published articles in leading peer-reviewed journals, as well as technical reports in which consumer attitudes, choices, and behavior have been the focus.
- 8. Prior to joining NERA, I served as a principal, president, and director of the market analysis and survey research practice for HBRS, Inc. and Hagler Bailly, Inc. for more than 15 years. I also served as president and CEO of Primen, a market intelligence firm that was a joint venture of the Electric Power Research Institute and the Gas Research Institute.
- 9. Earlier in my career, I was a tenured associate professor at the University of Tennessee where I taught undergraduate and graduate level courses in statistics, survey research methods, and social psychology. I also taught as a visiting associate professor at the University of Wisconsin.

- 10. I hold a B.A. from Hamline University in sociology and an M.A. and Ph.D. in sociology from Washington State University, with a specialization in research methods and statistics.
- 11. I have designed and reviewed studies on the application of survey research and sampling methods in litigation for a variety of matters, including misrepresentative/deceptive advertising, patent infringement, trademark/trade dress infringement, as well as in matters related to mass torts, antitrust, labor and employment matters, and product liability. I have also testified at trials and in depositions in both state and federal courts in a wide range of cases on the application of statistical methods, sampling, and the use of surveys. A copy of my C.V. is attached as Exhibit DX 471 hereto.
- 12. NERA is being compensated for my services in this matter at my standard rate of \$700 per hour. Other NERA consultants assisted me in this engagement and are being compensated at rates less than \$700 per hour. No part of my compensation or NERA's depends on the outcome of this litigation.

#### My Assignment

13. I was asked by counsel for defendant United Parcel Service, Inc. ("UPS") to review and opine on the design and implementation of the survey described in the expert report submitted by Dr. Christopher Erath on June 13, 2016 ("Erath Report"), and a revised expert report submitted on June 23, 2016 ("Erath Revised Report"). Unless otherwise noted, my opinions refer to the Erath Revised Report.

#### Dr. Erath's Survey

- 14. The Erath Revised Report states that Dr. Erath's assignment was to "assist in determination of the percent of shipments sent by EExpress via UPS to addresses within New York State that contained cigarettes." (Erath Revised Report, p. 1.)
- 15. Dr. Erath said that he obtained from the Office of the New York State Attorney General ("NYSAG") records of 11,195 shipments from EExpress, or several purported EExpress aliases or DBAs, which were allegedly transported by UPS to 896 unique addresses over the period from September 21, 2012 to June 25, 2014. From these 11,195 shipments, Dr. Erath drew a sample of 500 shipments that had been sent to 328 "unique addresses." (Erath Revised Report, p. 1.)
- NYSAG served as interviewers. Due to "time constraints," interviewers attempted to contact only 235 addresses out of the sample of 500 shipments. (Erath Revised Report, p. 2 & fn. 3.)

  These attempts resulted in only 52 successful contacts, of which 20 interviews were "discarded" because respondents indicated that they had not received any packages from EExpress or its alleged DBAs or because they report they did not have any tobacco products shipped to them. (Erath Revised Report, p. 3.) Thus, the results presented in the Erath Revised Report were based on a sample of only 32 completed interviews. Based on the data from these 32 interviews, Dr. Erath concluded that "[his] survey shows a very high incidence of cigarette receipt among EExpress recipients." (Erath Revised Report, p. 4.)

#### Dr. Erath's Study Was Not Double-Blind

17. It is important when conducting research for litigation not to bias respondents or provide them with clues about the sponsor or purpose of the study that may influence their

responses. (*See* Jay, E. D. (2013) "Ten Truths of False Advertising Surveys," The Trademark Reporter, 103(5), pp. 1157-1158. A copy of this article, on which I relied in forming my expert opinion, is attached hereto as Exhibit DX-470.) One method that is commonly used to avoid this influence is to conduct the study in such a manner that the respondents and the interviewers are blind to the sponsor and purpose of the study. This is referred to as conducting a "double-blind" survey and it is standard practice for surveys in litigation. (Diamond, S. (2011) "Reference Guide on Survey Research" in the *Reference Manual on Scientific Evidence Third Edition*.

Federal Judicial Center (hereafter, "Diamond"), pp. 410-411. A copy of this chapter, on which I relied in forming my expert opinion, is attached hereto as DX-457.)

- 18. In a double-blind survey, both the interviewer and the respondent are blind to the sponsorship and purpose of the survey. The goal is that the script used for the survey provides no explicit or implicit clues about the sponsorship of the survey or the expected responses. (*See* Ex. DX-457, Diamond, pp. 410-411.)
- 19. When respondents or interviewers are aware of the purpose and sponsor of a survey, they may either wittingly or unwittingly alter their behavior based on this knowledge. For example, as Professor Diamond has noted, "[I]f a survey concerning attitudes toward gun control is sponsored by the National Rifle Association, it is clear that responses opposing gun control are likely to be preferred." (Ex. DX-457, Diamond, p. 411.) Thus, "the standard practice is to conduct double-blind surveys for litigation," because this practice helps "to eliminate any possible biases from clues that might affect how the questions are posed and answered." (Keller, B. (2012). "Survey Evidence in False Advertising Cases," *Trademark and Deceptive Advertising Surveys: Law, Science, and Design*, American Bar Association, p. 181. A

copy of this chapter, on which I relied in forming my expert opinion, is attached hereto as Exhibit DX-496.)

21.

- 20. Here, Dr. Erath's survey was not conducted in a double-blind manner. In fact, the survey interviews were conducted by employees of the NYSAG, and respondents were *informed* of this fact at the start of the survey.
  - The scripted introduction to Dr. Erath's survey is as follows:

    Hello, I am with the Office of the Attorney General of the State of New York and we are researching shipping practices within the state. You are not in any trouble but I need to ask you a few quick questions as part of the investigation. It shouldn't take more than two minutes.

A copy of this document, on which I relied in forming my expert opinion, is attached hereto as Exhibit DX-495.

- 22. In my opinion and extensive experience, identifying the purpose of the study as "part of [an] investigation" likely affected potential respondents' willingness to participate in the survey and the responses that were given by those who did participate.
- 23. Furthermore, as employees of the NYSAG's Office, Dr. Erath's interviewers most likely knew the desired or expected outcomes of the survey. In general, interviewers' knowledge of the purpose or sponsorship of a survey can lead to knowingly or unknowingly encouraging desired responses, which in the context of this survey would mean encouraging responses that are sympathetic to Plaintiffs' position. Such expectations can create bias in the answers that respondents give, whether or not the expectations were communicated intentionally to respondents. (*See* Ex. DX-457, Diamond, p. 410.)

24. Dr. Erath should have, at a minimum, had his survey administered by an independent, neutral, third party professional survey firm that would have had the capability to conduct the survey double-blind.

## Use of Untrained and Inexperienced NYSAG Employees to Conduct the Interviews Led to Inconsistent Questioning and Other Errors

- 25. In addition to the bias created by not performing the survey double-blind, use of NYSAG employees to conduct the interviews was improper because they were not qualified nor were they properly trained or instructed.
- 26. Properly conducted telephone surveys require experienced and professionally-trained interviewers to ensure that the correct procedures are followed when administering the questionnaire. (*See* Ex. DX-457, Diamond, p. 409.) A well-trained interviewer should be able to ask the questions neutrally and consistently, phrased exactly as they are written, and to record the answers verbatim— or exactly as stated by the respondent.
- 27. In my experience, this requires training because the average person does not understand the need to ask questions in a uniform and neutral manner and to record answers verbatim. Typically, the interviewers should record the respondents' answers exactly, indicate when a question was repeated and record any clarifications, supplemental questions, or other non-scripted statements. (*See* Ex. DX-457, Diamond, p. 409.) Failure to conduct a survey in accordance with proper protocols, as here, can lead to errors or biases that render the results unreliable.
- 28. Yet, Dr. Erath did not provide any indication that the NYSAG employees had experience or training in conducting surveys, or that they were directly supervised by someone with survey experience. In fact, Dr. Erath himself stated that the NYSAG employees failed to follow protocols in 13 out of 32 cases, or 41 percent of the time. (Erath Revised Report, p. 3.)

#### Dr. Erath's Survey Questions Suffer from Important Shortcomings and Omissions.

- 29. As noted in the Erath Revised Report, "The goal of this project was to determine the fraction of EExpress shipments sent to New York via UPS that contained cigarettes" during the relevant time period. (Erath Revised Report, p. 2.)
- 30. According to his report, of the 32 respondents included in his analysis, 30 supposedly stated that they received shipments of cigarettes. However, Dr. Erath's interview script was not written in a manner that justifies this conclusion.
- 31. In my opinion and based on my extensive survey experience, there are important shortcomings and omissions in the survey questions posed to survey respondents.
- 32. First, Dr. Erath's script never identifies an individual shipment about which he was asking questions or by which carrier. The interviewers simply asked respondents if they had *ever* ordered *anything* from a listed set of companies, with no specification in the script about which carriers delivered the shipments that respondents received. (Ex. DX-495) In fact, it is possible that respondents could have answered the survey questions in reference to packages that were delivered by carriers other than UPS.
- 33. Second, the survey did not specify a time period in which these shipments may have taken place, instead asking respondents if they had "ever" ordered or received shipments or tobacco products. While respondents were asked if they resided or worked at an address during a particular month or year, there is no mention of the relevant time period supposedly covered by his survey anywhere in the substantive part of the script relating to these deliveries. (Ex. DX-495.) As a practical matter, the script covered all deliveries that may have been received at *any time* and could have caused survey respondents to provide answers regarding deliveries that occurred before or after the time period in question.

- 34. Third, in the selected sample of EExpress shipments by UPS during the relevant time period, some addresses received more than one package—possibly up to seven. (Erath Revised Report, p. 1.) Yet no respondent answered the question about the percentage of shipments or the percentage of a given shipment that included cigarettes. Either this is because the NYSAG employees failed to ask the question, or the question was too ambiguous for respondents to provide a meaningful answer.
- 35. Fourth, surveys such as these generally make distinctions between similar products to avoid confusion. In this instance, Dr. Erath should have made a distinction between similar tobacco products, such as cigarettes and little cigars, to eliminate confusion. It is my understanding that little cigars are another tobacco product similar to cigarettes in size and shape, yet Dr. Erath's survey questions did not specifically name these two products separately to remind respondents of the distinction. (*See* Ex. DX -457, Diamond, p. 387.) Thus, some respondents could have said that they received cigarettes when, in fact, they received little cigars.
- 36. When, as here, critical questions are unclear or omitted from the script, the reliability of the data collected is called into question and this is often a basis for rejecting the survey. (Ex. DX-457, Diamond, p. 388.) In order to collect the survey data, the NYSAG employees, who had not received training nor been given written instructions, may have resorted to improvising question phrasing as they went along. These deficiencies likely contributed to a high rate of error, as Dr. Erath reports that relevant questions were omitted and "the investigator[s] may not have used the scripted language" in 13 out of 32, or 41 percent, of the interviews that he included in his analysis. (Erath Revised Report, p. 3.)

#### Dr. Erath Did Not Address the Potential for Recall Bias or Take Steps to Prevent Guessing

- 37. In addition to biases and errors noted above that make the responses elicited unreliable, Dr. Erath has not addressed the potential for recall bias in his survey responses.
- 38. Recall bias occurs when there are systemic errors in survey responses that are due to respondents' ability or inability to accurately or completely recall past events or experiences. This bias increases the uncertainty regarding the validity and accuracy of the information he obtained from respondents.
- 39. The survey literature suggests two of the factors that should be considered when assessing the accuracy of reports on past events are (i) the passage of time and (ii) the salience of the event. (*See* Weisberg, H. F. (2005), *The Total Survey Error Approach, A Guide to the New Science of Survey Research*. The University of Chicago Press (hereafter, "Weisberg"), p. 77. A copy of this article, on which I relied in forming my expert opinion, is attached hereto as Exhibit DX-524.)
- 40. Moreover, respondents' ability to recall is often worse when they are asked to combine multiple pieces of information or provide full details. (Ex. DX-524, Weisberg, pp. 76-81.)
- 41. Dr. Erath's sample included respondents who had received multiple shipments. The relevant shipments had been received two to 3.5 years before the interview took place. Two to 3.5 years is a significant passage of time, and receiving a package may not be a salient event. Thus, it is very likely that respondents would have had a difficult time remembering the details of a package that they may have received during the relevant time period (or *ever* as the questions suggested).

- 42. In fact, during the relevant time period, respondents may have received packages from a number of different online retailers or carriers, but Dr. Erath did not ask any questions to determine this information. It is unlikely that respondents would be able to recall the contents of each package they received during the relevant time period, and there is no reason to think that packages received from EExpress and delivered by UPS would be more salient than packages they received from other retailers or other carriers.
- 43. Thus, Dr. Erath's survey questions presented a difficult recall task for respondents, and this likely affected their ability to provide accurate and complete responses.
- 44. Although Dr. Erath did not consistently report respondents' verbatim responses from the telephone interviews, there is evidence from the interviewer notes in his data that some respondents had difficulty with the recall task. For example, some interviewers' notes indicate Dr. Erath's respondents had trouble recalling whether they ever ordered from EExpress or ever ordered from an Indian Reservation at all, or whether cigarettes were the only product that they ordered, or the percentage of the orders placed that may have contained cigarettes.
- 45. There are six respondents out of the 32 on which Dr. Erath relied, or 19 percent, who did not remember if they ever ordered from EExpress. And, overall, 31 percent of respondents did not recall answers for certain relevant questions. This means that some of the respondents may have provided inaccurate or incomplete responses due to problems in recalling the transactions in question, particularly because Dr. Erath's script does not appropriately skip respondents out of questions when they say they do not know or do not recall. For example, Question 3 asks, "Have you ever ordered anything from [EExpress or one of its DBAs]?" The script directs NYSAG employees to ask a set of follow up questions that correspond to whether a respondent answered "yes" or "no" to Question 3. The script provides no instructions for

NYSAG employees in the event that a respondent indicates in Question 3 that he or she does not know or cannot recall ever ordering from EExpress or its DBAs. (Ex. DX-495) Further, even though respondents indicated they did not recall using EExpress or one of its DBAs they are asked a series of additional questions about cigarette shipments for which their responses are assumed by Dr. Erath to refer to shipments from EExpress. (Erath Tr. 140:7-141:4.)

- 46. As a result, the responses that Dr. Erath relied upon to form his conclusions are likely subject to recall errors due to failure to recall the details of packages received two to 3.5 years ago. Yet, despite evidence that his respondents had difficulty with the recall task, Dr. Erath said he made no efforts to assess or determine the extent of the recall bias or whether it affected the accuracy of his estimates. (Erath Tr. 117:15-19.)
- 47. Furthermore, Dr. Erath did not instruct respondents not to guess. (Erath Tr. 117:25-118:4.) It is generally considered best practice for survey experts to take steps to address issues for recall bias to minimize guessing. These steps include the use of filter questions and skip patterns to ensure that only qualified knowledgeable respondents are answering the questions, and the use of a specific prompt to remind respondents that they should say they do not know or do not recall if that is appropriate. (*See* Ex. DX-457, Diamond, p. 390.) Instead, as I noted above, the survey does not appropriately skip respondents out of questions when they repeatedly said they did not know or did not recall.
- 48. These steps are intended to minimize the likelihood of guessing and to encourage respondents who do not recall an answer to feel comfortable giving an "I don't know" response. Dr. Erath did not provide a survey script that included any instruction to respondents not to guess, nor did he provide answer categories which included an "I don't know" option.

49. In conclusion, Dr. Erath's study is unreliable because it relies on faulty survey design and implementation procedures that do not follow generally accepted practices for surveys used in litigation.

I declare under penalty of perjury, pursuant to 28 U.S.C. § 1746, that the foregoing is true and correct.

August 25, 2016 Denver, Colorado

Kent D. Van Liere, Ph.D.